

IN THE CLAIMS

1. (Original) A method comprising:
 - estimating a plurality of interpolated first color values from a plurality of first color values in a sub-block of image data, wherein the image data comprises first color values, second color values, and third color values;
 - deriving a plurality of second color hues using the second color values and the interpolated first color values; and
 - estimating a plurality of interpolated second color hues using the second color hues.
2. (Original) The method of claim 1, further comprising:
 - deriving a second plurality of second color values from the plurality of interpolated second color hues.
3. (Original) The method of claim 1, further comprising:
 - deriving a plurality of third color hues using the third color values and the interpolated first color values;
 - estimating a plurality of interpolated third color hues using the third color hues;
 - and
 - deriving a second plurality of third color values from the plurality of interpolated third color hues.
4. (Original) The method of claim 1, estimating a plurality of interpolated first color values from a plurality of first color values in a sub-block of image data further comprising:
 - identifying four direct neighbors in the sub-block; and
 - using the first color values from the four direct neighbors to estimate an interpolated first color value.

5. (Original) The method of claim 4, using the first color values from the four direct neighbors to estimate an interpolated first color value further comprising:

determining that the sub-block is a smooth zone; and

averaging four first color values from the four direct neighbors to produce the interpolated first color value.

6. (Original) The method of claim 5, determining that the sub-block is a smooth zone further comprising:

identifying four first color values for the four direct neighbors; and

determining that the four first color values are substantially similar.

7. (Original) The method of claim 4, using the first color values from the four direct neighbors to estimate an interpolated first color value further comprising:

determining that the sub-block is an edge zone; and

averaging three of the four direct neighbors whose first color values are similar to produce an edge zone average;

multiplying the edge zone average by a predetermined value to produce a result;

and

averaging the result with the remaining direct neighbor.

8. (Original) The method of claim 7, determining that the sub-block is an edge zone further comprising:

identifying four first color values for the four direct neighbors; and

determining that three of the four first color values are substantially similar.

9. (Original) The method of claim 4, using the first color values from the four direct neighbors to estimate an interpolated first color value further comprising:

determining that the sub-block is a stripe zone;

averaging the first color values for a first direct neighbor and a second direct neighbor to produce a stripe zone average where the first direct neighbor and the second direct

neighbor form a stripe and the first color values for the first direct neighbor and the second direct neighbor are substantially similar;

 multiplying the stripe zone average by a predetermined value to produce a first partial result;

 averaging the first color values for the third direct neighbor and the fourth direct neighbor to produce a second partial result;

 adding the first partial result and the second partial result together to produce a stripe zone result; and

 dividing the stripe zone result by four.

10. (Original) The method of claim 9, determining that the sub-block is a stripe zone further comprising:

 identifying four first color values for the four direct neighbors; and

 determining that a first pair of the four first color values are substantially similar.

Claims 11-17 (Canceled).

18. (Original) An article comprising a medium storing a software program for enabling a processor-based system to:

 estimate a plurality of interpolated first color values from a plurality of first color values in a sub-block of image data, wherein the image data comprises first color values, second color values, and third color values;

 derive a plurality of second color hues using the second color values and the interpolated first color values; and

 estimate a plurality of interpolated second color hues using the second color hues.

19. (Original) The article of claim 18, further storing a software program for enabling a processor-based system to:

 derive a second plurality of second color values from the plurality of interpolated second color hues.

20. (Original) The article of claim 19, further storing a software program for enabling a processor-based system to:

derive a plurality of third color hues using the third color values and the interpolated first color values;

estimate a plurality of interpolated third color hues using the third color hues; and

derive a second plurality of third color values from the plurality of interpolated third color hues.

21. (Original) The article of claim 20, further storing a software program for enabling a processor-based system to:

identify four direct neighbors in the sub-block; and

use first color values from the four direct neighbors to estimate an interpolated first color value.
